

# Fabrizio Di Pasquale

## List of Publications by Year in descending order

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76  
papers

1,958  
citations

236925

25  
h-index

243625

44  
g-index

76  
all docs

76  
docs citations

76  
times ranked

1212  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Fast FBG Interrogator on Chip Based on Silicon on Insulator Ring Resonator Add/Drop Filters. Journal of Lightwave Technology, 2022, 40, 5328-5336.  | 4.6 | 4         |
| 2  | A Novel Pulse Compression Scheme in Coherent OTDR Using Direct Digital Synthesis and Nonlinear Frequency Modulation. Lecture Notes in Electrical Engineering, 2021, , 173-181.                      | 0.4 | 1         |
| 3  | Fiber Bragg Grating Sensors for Dynamic Strain Measurements in Gasoline Direct Injectors. IEEE Transactions on Vehicular Technology, 2021, 70, 5658-5668.   | 6.3 | 2         |
| 4  | Monitoring Large Railways Infrastructures Using Hybrid Optical Fibers Sensor Systems. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 5177-5188.                                 | 8.0 | 22        |
| 5  | On the integration of FBG sensing technology into robotic grippers. International Journal of Advanced Manufacturing Technology, 2020, 111, 1173-1185.   | 3.0 | 12        |
| 6  | Fast FBG sensor interrogation method based on silicon microring resonators. , 2020, , .   |     | 1         |
| 7  | High-Speed FBG Interrogation With Electro-Optically Tunable Sagnac Loops. Journal of Lightwave Technology, 2020, 38, 4513-4519.   | 4.6 | 12        |
| 8  | A High-SNR Distributed Acoustic Sensor Based on $\dot{\Gamma}$ -OTDR Using a Scalable Phase Demodulation Scheme Without Phase Unwrapping. Lecture Notes in Electrical Engineering, 2020, , 233-241. | 0.4 | 0         |
| 9  | Integrated Dynamic Wavelength Division Multiplexed FBG Sensor Interrogator on a Silicon Photonic Chip. Journal of Lightwave Technology, 2019, 37, 4770-4775.  | 4.6 | 18        |
| 10 | Application of Raman and Brillouin Scattering Phenomena in Distributed Optical Fiber Sensing. Frontiers in Physics, 2019, 7, .  | 2.1 | 33        |
| 11 | Dynamic phase extraction in high-SNR DAS based on UWFBGs without phase unwrapping using scalable homodyne demodulation in direct detection. Optics Express, 2019, 27, 10644.                        | 3.4 | 30        |
| 12 | Micro-interferometers on chip for sensing applications. , 2019, , .   |     | 0         |
| 13 | Distributed Raman Sensing. , 2019, , 1609-1662.   |     | 0         |
| 14 | Distributed Raman Sensing. , 2018, , 1-55.  |     | 4         |
| 15 | Current Status and Future Trends of Photonic-Integrated FBG Interrogators. Journal of Lightwave Technology, 2018, 36, 946-953.  | 4.6 | 36        |
| 16 | Dynamic phase extraction in a modulated double-pulse $\dot{\Gamma}$ -OTDR sensor using a stable homodyne demodulation in direct detection. Optics Express, 2018, 26, 687.                           | 3.4 | 75        |
| 17 | Stable dynamic phase demodulation in a DAS based on double-pulse $\dot{\Gamma}$ -OTDR using homodyne demodulation and direct detection. , 2018, , .   |     | 2         |
| 18 | Integrated, scalable and reconfigurable Silicon Photonics based optical switch for colorless, directionless and contentionless operation. , 2018, , .   |     | 1         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Mach-Zehnder-based 1Å–16 multiplexer in SOI and analysis of phase noise properties. , 2018, , .   |     | 2         |
| 20 | Integrated FBG Sensors Interrogation Using Active Phase Demodulation on a Silicon Photonic Platform. Journal of Lightwave Technology, 2017, 35, 3374-3379.                            | 4.6 | 34        |
| 21 | Distributed Optical Fiber Radiation Sensing in a Mixed-Field Radiation Environment at CERN. Journal of Lightwave Technology, 2017, 35, 3303-3310.                                     | 4.6 | 34        |
| 22 | Design and Implementation of an Integrated Reconfigurable Silicon Photonics Switch Matrix in IRIS Project. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 155-168. | 2.9 | 44        |
| 23 | Hybrid distributed acoustic and temperature sensor using a commercial off-the-shelf DFB laser and direct detection. Optics Letters, 2016, 41, 587.                                    | 3.3 | 34        |
| 24 | Advanced Coding Techniques for Long-Range Raman/BOTDA Distributed Strain and Temperature Measurements. Journal of Lightwave Technology, 2016, 34, 342-350.                            | 4.6 | 29        |
| 25 | A Cost-Effective Distributed Acoustic Sensor Using a Commercial Off-the-Shelf DFB Laser and Direct Detection Phase-OTDR. IEEE Photonics Journal, 2016, 8, 1-10.                       | 2.0 | 71        |
| 26 | Integrated FBG Sensor Interrogator in SOI Platform using Passive Phase Demodulation. , 2016, , .  |     | 2         |
| 27 | Raman distributed temperature measurement at CERN high energy accelerator mixed field radiation test facility (CHARM). Proceedings of SPIE, 2015, , .                                 | 0.8 | 0         |
| 28 | Raman Distributed Temperature Sensing at CERN. IEEE Photonics Technology Letters, 2015, 27, 2182-2185.  | 2.5 | 32        |
| 29 | High performance distributed acoustic sensor using cyclic pulse coding in a direct detection coherent-OTDR. , 2015, , .   |     | 5         |
| 30 | High performance fiber optic sensor based on self referenced FBGs and high-speed dual-wavelength pulse coding. Proceedings of SPIE, 2015, , .   | 0.8 | 0         |
| 31 | Ring Versus Bus: A Theoretical and Experimental Comparison of Photonic Integrated NoC. Journal of Lightwave Technology, 2015, 33, 4870-4877.  | 4.6 | 17        |
| 32 | Optimized Hybrid Raman/Fast-BOTDA Sensor for Temperature and Strain Measurements in Large Infrastructures. IEEE Sensors Journal, 2014, 14, 4297-4304.                                 | 4.7 | 14        |
| 33 | Long-range accelerated BOTDA sensor using adaptive linear prediction and cyclic coding. Optics Letters, 2014, 39, 5411.   | 3.3 | 25        |
| 34 | Cyclic pulse coding for hybrid fast BOTDA/Raman sensor. , 2014, , .   |     | 1         |
| 35 | Raman distributed temperature sensor for oil leakage detection in soil: a field trial and future trends. , 2014, , .  |     | 2         |
| 36 | Fast Brillouin Optical Time Domain Analysis Sensor based on Adaptive Linear Prediction and Cyclic Pulse Coding. , 2014, , .   |     | 1         |

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|----|--|-----|-----------|
| 37 | High Performance Time Domain FBG Dynamic Interrogation Scheme Based on Pulse Coding. IEEE Photonics Technology Letters, 2013, 25, 460-463.   | 2.5 | 13        |
| 38 | Analysis and Design of Microring-Based Switching Elements in a Silicon Photonic Integrated Transponder Aggregator. Journal of Lightwave Technology, 2013, 31, 3943-3955.                           | 4.6 | 20        |
| 39 | Bidirectional Crosstalk and Back-Reflection Free WDM Active Optical Interconnects. IEEE Photonics Technology Letters, 2013, 25, 1973-1976.   | 2.5 | 6         |
| 40 | Integrated TE and TM optical circulators on ultra-low-loss silicon nitride platform. Optics Express, 2013, 21, 5041.   | 3.4 | 60        |
| 41 | Numerical study of high-index-contrast Er:LiNbO <sub>3</sub> photonic wire lasers optically pumped at 980Ånm. Applied Optics, 2013, 52, 4438.  | 1.8 | 3         |
| 42 | Integrated bidirectional optical amplifier for crosstalk-free WDM communication. , 2013, , .   |     | 2         |
| 43 | Study of Raman amplification in DPP-BOTDA sensing employing Simplex coding for sub-meter scale spatial resolution over long fiber distances. Measurement Science and Technology, 2013, 24, 094018. | 2.6 | 8         |
| 44 | RAMAN BASED DISTRIBUTED OPTICAL FIBER TEMPERATURE SENSORS: INDUSTRIAL APPLICATIONS AND FUTURE DEVELOPMENTS. , 2013, , 88-113.  |     | 0         |
| 45 | Optimization of a DPP-BOTDA sensor with 25 cm spatial resolution over 60 km standard single-mode fiber using Simplex codes and optical pre-amplification. Optics Express, 2012, 20, 6860.          | 3.4 | 61        |
| 46 | Hybrid Raman/fiber Bragg grating sensor for distributed temperature and discrete dynamic strain measurements. Optics Letters, 2012, 37, 4434.  | 3.3 | 18        |
| 47 | Integrated hybrid Raman/fiber Bragg grating interrogation scheme for distributed temperature and point dynamic strain measurements. Applied Optics, 2012, 51, 7268.                                | 1.8 | 12        |
| 48 | Raman-assisted DPP-BOTDA sensor employing Simplex coding with sub-meter scale spatial resolution over 93 km standard SMF. , 2012, , .  |     | 1         |
| 49 | Simplex-Coded BOTDA Sensor Over 120-km SMF With 1-m Spatial Resolution Assisted by Optimized Bidirectional Raman Amplification. IEEE Photonics Technology Letters, 2012, 24, 1823-1826.            | 2.5 | 62        |
| 50 | Hybrid BOTDA/FBG sensor for discrete dynamic and distributed static strain/temperature measurements. , 2012, , .   |     | 8         |
| 51 | Impact of Loss Variations on Double-Ended Distributed Temperature Sensors Based on Raman Anti-Stokes Signal Only. Journal of Lightwave Technology, 2012, 30, 1215-1222.                            | 4.6 | 45        |
| 52 | Enhanced-performance BOTDA sensing through optimized pulse coding and low-RIN bidirectional Raman amplification. , 2012, , .   |     | 0         |
| 53 | Long-range BOTDA sensing using optical pulse coding and single source bi-directional distributed Raman amplification. , 2011, , .  |     | 3         |
| 54 | Optimization of long-range BOTDA sensors with high resolution using first-order bi-directional Raman amplification. Optics Express, 2011, 19, 4444.  | 3.4 | 95        |

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|----|--|-----|-----------|
| 55 | Long-range simplex-coded BOTDA sensor over 120km distance employing optical preamplification. Optics Letters, 2011, 36, 232.   | 3.3 | 107       |
| 56 | Raman-based distributed temperature sensor with 1m spatial resolution over 26km SMF using low-repetition-rate cyclic pulse coding. Optics Letters, 2011, 36, 2557.                       | 3.3 | 96        |
| 57 | Design of transverse electric ring isolators for ultra-low-loss Si <sub>3</sub> N <sub>4</sub> waveguides based on the finite element method. Optics Letters, 2011, 36, 4599.            | 3.3 | 19        |
| 58 | BOTDA sensor with 2-m spatial resolution over 120 km distance using bi-directional distributed Raman amplification. , 2011, , .  |     | 3         |
| 59 | Design of 980 nm-Pumped Waveguide Laser for Continuous Wave Operation in Ion Implanted Er <sup>3+</sup> :LiNbO <sub>3</sub> . IEEE Journal of Quantum Electronics, 2011, 47, 526-533.    | 1.9 | 11        |
| 60 | Distributed optical fiber temperature sensor using only anti-Stokes Raman scattering light in a loop configuration. , 2011, , .  |     | 0         |
| 61 | Advanced cyclic coding technique for long-range Raman DTS systems with meter-scale spatial resolution over standard SMF. , 2011, , .   |     | 11        |
| 62 | Enhanced distributed hybrid sensor based on Brillouin and Raman scattering combining Fabry-Perot lasers and optical pulse coding. , 2010, , .  |     | 2         |
| 63 | Impact of the pulse modulation format on distributed BOTDA sensors based on Simplex coding. Proceedings of SPIE, 2010, , .   | 0.8 | 0         |
| 64 | Analysis of pulse modulation format in coded BOTDA sensors. Optics Express, 2010, 18, 14878.   | 3.4 | 87        |
| 65 | Simplex-coded BOTDA fiber sensor with 1 m spatial resolution over a 50 km range. Optics Letters, 2010, 35, 259.  | 3.3 | 284       |
| 66 | Long-range Brillouin optical time-domain analysis sensor employing pulse coding techniques. Measurement Science and Technology, 2010, 21, 094024.  | 2.6 | 47        |
| 67 | Simultaneous distributed strain and temperature sensing based on combined Raman and Brillouin scattering using Fabry-Perot lasers. Measurement Science and Technology, 2010, 21, 094025. | 2.6 | 12        |
| 68 | Effect of Si-nc to Er <sup>3+</sup> Coupling Ratio in EDWAs Longitudinally Pumped by Visible Broad-Area Lasers. Journal of Lightwave Technology, 2009, 27, 3342-3350.                    | 4.6 | 6         |
| 69 | Fiber-Optic Distributed Sensor Based on Hybrid Raman and Brillouin Scattering Employing Multiwavelength Fabry-Perot Lasers. IEEE Photonics Technology Letters, 2009, 21, 1523-1525.      | 2.5 | 27        |
| 70 | Use of Fabry-Perot lasers for simultaneous distributed strain and temperature sensing based on hybrid Raman and Brillouin scattering. Proceedings of SPIE, 2009, , .                     | 0.8 | 0         |
| 71 | Performance improvement in Brillouin-based simultaneous strain and temperature sensors employing pulse coding in coherent detection schemes. , 2009, , .                                 |     | 0         |
| 72 | Evanescent Multimode Longitudinal Pumping Scheme for Si-Nanocluster Sensitized Er <sup>3+</sup> -Doped Waveguide Amplifiers. Journal of Lightwave Technology, 2008, 26, 3584-3591.       | 4.6 | 10        |

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|----|--|-----|-----------|
| 73 | Analysis of optical pulse coding in spontaneous Brillouin-based distributed temperature sensors. Optics Express, 2008, 16, 19097.  | 3.4 | 65        |
| 74 | Brillouin-Based Distributed Temperature Sensor Employing Pulse Coding. IEEE Sensors Journal, 2008, 8, 225-226.   | 4.7 | 50        |
| 75 | Analysis of distributed temperature sensing based on Raman scattering using OTDR coding and discrete Raman amplification. Measurement Science and Technology, 2007, 18, 3211-3218. | 2.6 | 97        |
| 76 | Unrepeated WDM Transmission Systems Based on Advanced First-Order and Higher Order Raman-Copumping Technologies. Journal of Lightwave Technology, 2007, 25, 3519-3527.             | 4.6 | 7         |